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WPI Acc No: 1998-193547/199817

Isolated salivary glyco-protein CON-1 and CON-2 compositions - which have alpha-glucosidase inhibitory activity, useful for treating diabetes or retrovirus, particularly HIV infection

Patent Assignee: WISCONSIN ALUMNI RES FOUND (WISC); AZEN E A (AZEN-I); PAN D (PAND-I)

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Number of Countries: 067 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9809981	A1	19980312	WO 97US15799	A	19970908	199817 B
AU 9743359	A	19980326	AU 9743359	A	19970908	199832
US 5981720	A	19991109	US 9624712	A	19960909	199954
			US 97925237	A	19970908	

Priority Applications (No Type Date): US 9624712 A 19960909; US 97925237 A 19970908

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9809981 A1 E 54 C07H-021/04

Designated States (National): AL AU BA BB BG BR CA CN CU CZ EE GE HU IL IS JP KP KR LC LK LR LT LV MG MK MN MX NO NZ PL RO SG SI SK TR TT UA UZ VN

Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9743359 A C07H-021/04 Based on patent WO 9809981

US 5981720 A C08H-001/00 Provisional application US 9624712

Abstract (Basic): WO 9809981 A

Recombinant DNA molecule (A) comprises a promoter operably linked to a CON-1 encoding sequence.

Also claimed are:

(1) a recombinant DNA molecule (B) comprising a promoter operably linked to a CON-2 encoding sequence;

(2) purified protease-free CON-1 having 124 amino acid residues;

(3) purified protease-free CON-1 having 82 amino acid residues;

(4) a method of purifying CON-1 or CON-2 comprising:

(a) heating a CON-1 or CON-2 containing mixture of proteins to denature any proteases contained in it;

(b) precipitating contaminants by the addition of alcohol and recovering the supernatant;

(c) sorbing protein recovered from the supernatant to hydroxyapatite and eluting CON-1 or CON-2;

(d) electro-phoresing on a denaturing gel, and

(e) eluting CON-1 or CON-2 from the gel;

(5) a method of reducing infectivity of retroviruses comprising contacting the retroviruses with a protein selected from purified CON-1, CON-2, or fragments, to inhibit alpha -glucosidase (AGS) processing of the retroviral envelope protein to make the retrovirus cell penetration competent;

(6) a method of alleviating excess uptake glucose in diabetes by administering to a diabetic purified CON-1, CON-2, or bioactive fragments retaining AGS inhibitory activity, to inhibit the breakdown of complex carbohydrates to absorbable glucose by the AGS inhibitory activity of the CON-1, CON-2 or bioactive fragments;

(7) an oral composition for alleviating excess uptake of simple

sugars in diabetes comprising CON-1, CON-2, or bioactive fragments retaining AGS inhibitory activity in a dose encapsulated in an enteric coating;

(8) an injectable composition for inhibiting proliferation of HIV-1 comprising a bioactive fragment of CON-1 or CON-2 having AGS inhibitory activity, dissolved in diluent;

(9) a synthetic glycosylated peptide having the AGS inhibitory activity of CON-1 protein comprising a tetrapeptide of primary structure of formula (I):

Gly-Gly-Asn(acetylglucosamine)-Lys (I);

(10) a carrier glycosylated tetrapeptide comprising a tetrapeptide of structure (I), and a carrier, and

(11) a synthetic glycosylated pyridoxylated peptide having an enhanced AGS inhibitory activity compared to the inhibitory activity of the unmodified peptide comprising a tetrapeptide of primary structure of formula (II):

Gly-Gly-Asn(acetyl-glycosamine)-pyridoxyl-Lys (II).

USE - The salivary glycoproteins CON-1 and CON-2 and derivatives, have AGS inhibitory activity and can be used to treat patients with diabetes or patients infected with retroviruses such as HIV.

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Derwent Class: B04; D16

International Patent Class (Main): C07H-021/04; C08H-001/00

International Patent Class (Additional): A61K-038/00; C07K-001/00;

C07K-001/16; C07K-001/30; C07K-005/00; C07K-014/00

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WPI Acc No: 1998-145216/199813

Delayed and sustained release compositions for absorption in colon - comprise active ingredient e.g. diamorphine or cocaine in e.g. tablet form with enteric coating

Patent Assignee: EVANS B K (EVAN-I); RHODES J (RHOD-I)

Inventor: EVANS B K; RHODES J

Number of Countries: 078 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9802148	A2	19980122	WO 97GB1935	A	19970716	199813 B
AU 9735530	A	19980209	AU 9735530	A	19970716	199823

Priority Applications (No Type Date): GB 9614902 A 19960716

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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WO 9802148	A2 E	27	A61K-031/00	
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Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9735530	A	A61K-031/00	Based on patent WO 9802148
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Abstract (Basic): WO 9802148 A

Rectally administrable and post-gastric delayed release oral composition comprises at least one active ingredient (I) selected from diamorphine, morphine, cocaine, theophylline, aminophylline, phenytoin, carbamazepine, phenobarbitone, cyclosporin, diazepam, nitrazepam,